

Appendix A

Conservation Objectives for Pacific Coast Fisheries

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Conservation objectives and management information for natural and hatchery salmon stocks and stock complexes of significance to ocean salmon fisheries. Abundance information is based on the previous five years.

Stock	Conservation Objective (to be met annually unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Management Information
--- CHINOOK ---			
CALIFORNIA CENTRAL VALLEY - All fall, late-fall, winter, and spring stocks of the Sacramento and San Joaquin Rivers and their tributaries. Management of this stock complex is based primarily on Sacramento River fall chinook, which includes a large hatchery component, and natural Sacramento River winter chinook which are listed as endangered. The San Joaquin system has been severely degraded by water development projects and pollution. Natural populations of spring chinook there have been extirpated and remaining spawning areas are utilized primarily by fall chinook which have comprised <10% of the total Central Valley fall run.			
Sacramento River Fall	122,000 to 180,000 natural and hatchery adult spawners (MSY proxy adopted 1984) This objective is intended to provide adequate escapement of natural and hatchery production for Sacramento and San Joaquin fall and late-fall stocks (based on habitat conditions and average run-sizes as follows: Sacramento River 1953-1960 and San Joaquin River 1972-1977). Further details in Council (1984) and (1994), ASETF (1979).	Yes.	High abundance, large hatchery component. Single largest contributor to ocean fisheries off California, a significant contributor off southern and central Oregon, and present north into British Columbia. Primary impact south of Pt. Arena; considerable overlap with coastal and Klamath River fall chinook between Pt. Arena and Horse Mt.
Sacramento River Spring (Threatened - state listing)	Undefined for ocean management.	MSY criteria undefined. Assessment of ocean distribution and fishery impacts needed for ESA determination and to aid management. Present level of ocean fishery impacts limited by measures constraining harvest on Sacramento River winter and Klamath River fall chinook.	Severely depressed. Minor contributor to ocean fisheries off California, also known to occur off Oregon. Ocean fishery impacts primarily incidental to harvest of Sacramento River fall chinook and may be lower due to differences in run timing. MSY undefined but substantially reduced from historic levels by man-caused loss and deterioration of freshwater habitat.
Sacramento River Winter (Endangered)	NMFS jeopardy or recovery standard. Since 1996, Council has met an annual preseason objective of a 31% increase in the adult cohort replacement rate relative to the observed 1989-1993 mean rate.	MSY criteria undefined. ESA jeopardy standard provides interim rebuilding program.	Depressed and listed, recent increase. Minor contributor to ocean fisheries south of Pt. Arena. Ocean fishery impacts incidental to harvest of Sacramento River fall chinook. Primary impact south of Pt. Arena.

Conservation objectives and management information for natural and hatchery salmon stocks and stock complexes of significance to ocean salmon fisheries. Abundance information is based on the previous five years.

Stock	Conservation Objective (to be met annually unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Management Information
--- CHINOOK ---			
NORTHERN CALIFORNIA COAST - All fall and spring stocks of California streams north of the entrance to San Francisco Bay. Management of this stock complex is based primarily on meeting spawning escapements for natural fall chinook. Limited data is available except for the Klamath River. An assessment and monitoring program is under consideration by CDFG for stocks originating from the Smith, Eel, Mattole and Mad Rivers which might provide a more thorough management basis for the future. Significant water diversion problems in several drainages. In the Klamath River Basin, there is significant hatchery production of fall chinook and less so of spring chinook, resulting primarily from mitigation programs for dams constructed in both Upper Klamath and Trinity Rivers.			
Eel, Mattole, Mad, and Smith Rivers (Fall and Spring)	Undefined. Indices of spawning abundance limited to one tributary of the Mad River and two tributaries of the Eel River.	Data insufficient to define MSY criteria. CDFG developing an assessment and monitoring program. Conservation achieved by objective for Klamath River fall chinook and also benefits from that stock's inside allocation to tribal and recreational fisheries which keeps ocean fishery impacts low.	Depressed. Limited management data. Believed to occur in ocean fisheries off northern California and southern Oregon. Ocean fishery impacts incidental to fisheries for Sacramento and Klamath Rivers fall chinook. No preseason abundance estimates available.
Klamath River Fall (Klamath and Trinity Rivers)	Between 33% and 34% of the potential adult natural spawners, but no fewer than 35,000 naturally spawning adults in any one year. The brood escapement rate will average 33-34% over the long-term, but an individual brood may vary from this range to achieve the required tribal/nontribal annual allocation. This objective is designed to allow a wide range of spawner escapements from which to eventually develop an MSY objective or proxy while protecting the stock during prolonged periods of reduced productivity. (Adopted 1988; minor modifications in 1989 and 1996.) Further details in Council (1988), Hubbell and Boydston (1985), and KRTT (1986).	Yes. A conservation alert or overfishing concern will be based on a failure to meet the 35,000 floor.	Abundance variable from high to depressed. Major contributor to ocean fisheries from Humboldt Mt., OR to Horse Mt., CA (the KMZ) and to Klamath River tribal and recreational fisheries. Significant contributor to ocean fisheries from central Oregon to central California. Coastwide impacts are considered in meeting allocation requirements for Indian Tribes with federally recognized fishing rights and the inland fishery. Specific management measures for this stock generally are implemented from Pigeon Pt., California to Florence, Oregon.
Klamath River Spring (Klamath and Trinity Rivers)	Undefined.	MSY criteria undefined. Productive potential protected by the objective for Klamath River fall chinook and also benefits from that stock's inside allocation to tribal and recreational fisheries which keeps ocean fishery impacts low.	Depressed. Believed to occur in ocean fisheries off northern California and southern Oregon (based on Trinity River Hatchery fish). Impacts incidental to ocean fisheries for Sacramento and Klamath Rivers fall chinook.

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Conservation objectives and management information for natural and hatchery salmon stocks and stock complexes of significance to ocean salmon fisheries. Abundance information is based on the previous five years.

Stock	Conservation Objective (to be met annually unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Management Information
--- CHINOOK ---			
OREGON COAST - All fall and spring stocks from Oregon streams south of the Columbia River. No preseason abundance estimates available. Management based primarily on an aggregate objective of 150,000 to 200,000 natural adult spawners (attainment of objective based on a postseason estimate of 60-90 natural adult spawners per mile in nine standard index streams. Significant hatchery production.			
Southern Oregon (Aggregate of fall and spring stocks in all streams south of Elk River; Rogue River fall stock is used to indicate relative abundance and ocean contribution rates)	Unspecified portion of an aggregate 150,000 to 200,000 natural adult spawners for Oregon coast (MSY proxy). Conservation also ensured by the objective for Klamath River fall chinook (which includes a large inside allocation component that reduces ocean fishery exploitation rate in the areas inhabited by these fish.	Yes, based on postseason estimates of <60 natural adult spawners per mile. ODFW developing specific conservation objectives for spring and fall stocks.	Medium to low abundance. Data limited except for Rogue River fall stock. Stocks migrate southerly or remain local and fall chinook contribute to ocean fisheries off northern California and Oregon, less so for spring stocks.
Central and Northern Oregon (Aggregate of fall and spring stocks in all streams from the Elk River to just south of the Columbia River)	Unspecified portion of an aggregate 150,000 to 200,000 natural adult spawners for Oregon coast (MSY proxy).	Yes, based on postseason estimates of <60 natural adult spawners per mile. ODFW developing specific conservation objectives for spring and fall stocks.	Variable between high and medium abundance. Stocks migrate northward and contribute to ocean fisheries off British Columbia and Southeast Alaska and to a lesser degree off Washington and Oregon.

Conservation objectives and management information for natural and hatchery salmon stocks and stock complexes of significance to ocean salmon fisheries. Abundance information is based on the previous five years.

Stock	Conservation Objective (to be met annually unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Management Information
--- CHINOOK ---			
COLUMBIA RIVER BASIN - All pertinent fall, summer, and spring stocks of the Columbia River and its tributaries. Stocks within this complex are noted by their area of origin as: lower river (below Bonneville Dam), mid-river (Bonneville to McNary Dams), and upper river (above McNary Dam). Spawning escapement goals for these stocks are established through procedures of the U.S. District Court in <i>U.S. v. Oregon</i> and subsequent court orders. These goals are set forth in the Columbia River Fishery Management Plan and are recognized in the Council's conservation objectives. Annual inside fishery management planning activities are conducted within the Columbia River Compact and other state and tribal management forums. The Columbia River Compact, initially established by Oregon and Washington to jointly administer commercial fisheries within the Columbia River, takes into account the impacts from other state and tribal fisheries (e.g., recreational, ceremonial, subsistence, etc.) authorized under the Columbia River Fish Management Plan. The majority of ocean chinook harvest north of Cape Falcon is provided by Columbia River salmon stocks, primarily hatchery production of tule fall chinook from the Bonneville Pool (Spring Creek) and lower river hatcheries, smaller numbers of upper river bright hatchery and natural fall chinook, and some lower river hatchery spring chinook (Cowlitz). Hatchery objectives are based on long-range production programs and/or mitigation requirements associated with displaced natural stocks. Threatened Snake River fall chinook, which suffer severe dam passage mortalities and extreme loss of freshwater habitat, are of prime concern in limiting ocean exploitation rates in all ocean fisheries north of Pigeon Pt., California. This stocks conservation objectives act to provide considerable protection for other weak natural stocks subject to ocean fishery impacts.			
North Lewis River Fall	5,700 natural adult spawners (MSY).	Yes.	Medium abundance. Present in ocean fisheries north of Cape Falcon to Southeast Alaska.
Lower River Hatchery Fall	14,400 adults to meet egg-take goal.	No (hatchery exception).	Medium to low abundance. Major contributor to ocean fisheries north of Cape Falcon to central British Columbia.
Lower River Hatchery (Spring)	2,700 adults to meet Cowlitz, Kalama, and Lewis Rivers broodstock needs.	No (hatchery exception).	Medium to low abundance. Present in ocean fisheries north of Cape Falcon to Southeast Alaska.
Upper Willamette (Spring)	Hold ocean fishery impacts at or below base period (<1%) and recognize Willamette River Management Plan objectives (30,000 to 45,000 hatchery and natural adults over Willamette River falls, depending on run size).	No. Base period Council management area ocean fishery exploitation rate of <1% prevents effective Council fishery management and rebuilding.	Low abundance. Present in fisheries north of Cape Falcon to Southeast Alaska.
Mid-River Bright Hatchery (Fall)	None for ocean fishery management.	No (hatchery exception).	Medium to high abundance. Contributor to ocean fisheries off Washington, British Columbia, and southeast Alaska. Primarily produced at Bonneville Hatchery.
Spring Creek Hatchery (Fall)	7,000 adults to meet hatchery egg-take goal.	No (hatchery exception).	Low abundance. Significant contributor to ocean fisheries north of Cape Falcon to southern British Columbia.

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Pacific Salmon Fisheries Management PEIS

Conservation objectives and management information for natural and hatchery salmon stocks and stock complexes of significance to ocean salmon fisheries. Abundance information is based on the previous five years.

Stock	Conservation Objective (to be met annually unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Management Information
--- CHINOOK ---			
COLUMBIA RIVER BASIN (Continued)			
Klickitat, Warm Springs, John Day, and Yakima Rivers (Spring)	Hold ocean fishery impacts at or below base period (<1%) and recognize Columbia River Management Plan objective - MSY proxy of 115,000 adults above Bonneville Dam, including upper and mid-Columbia and Snake River stocks (state and tribal management entities considering separate conservation objectives for these stocks).	No. Base period Council management area ocean fishery exploitation rate of <1% prevents effective Council fishery management and rebuilding. Major habitat restoration addressing water withdrawals and dam passage and blockages is required for rebuilding.	Long-term depressed abundance. No significance to ocean fisheries, infrequent occurrence in fisheries north of Cape Falcon to Alaska.
Snake River Fall (Threatened)	NMFS jeopardy or recovery standard. Since 1995, Council has met a standard of limiting its fisheries so that the total exploitation rate on age-3 and age-4 Lyons Ferry Hatchery fall chinook (representing Snake River fall chinook) for all ocean fisheries (including Canada) has been \approx 70% of the 1988-1993 average adult equivalent exploitation rate.	MSY criteria undefined. ESA jeopardy standard provides interim rebuilding program. Recovering historic abundance unlikely as dams block former primary spawning area.	Present in ocean fisheries from central California to southeast Alaska with greatest contribution to Canadian fisheries. Primary impacts in Council fisheries north of Cape Falcon, but also extending to Pigeon Pt., CA.
Snake River Spring/Summer (Threatened)	Not applicable for ocean fisheries.	No. Base period Council management area ocean fishery impacts rare (unmeasurable). Dam passage mortality must be reduced to allow stock recovery.	Depressed, recent trend downward. Rare occurrence in ocean fisheries from Washington to Southeast Alaska.
Upper River Bright (Fall)	40,000 natural bright adults above McNary Dam (MSY proxy adopted 1984). The management goal has been increased to 45,000 by Columbia River managers in recent years.	Limited. Base period Council management area ocean fishery exploitation rate <4% prevents effective Council fishery management and rebuilding.	High to medium abundance. Significant contributor to ocean fisheries off Canada and to a lesser extent Washington and Oregon. Primary impact area north of Cape Falcon.
Upper River Summer	Hold ocean fishery impacts at or below base period (<2%) and recognize Columbia River Management Plan objective - MSY proxy of 80,000 to 90,000 adults above Bonneville Dam, including both Columbia and Snake River stocks (state and tribal management entities considering separate objectives for these stocks).	No. Base period Council management area ocean fishery exploitation rate <2% prevents effective Council fishery management and rebuilding. Dam passage mortalities must be reduced to allow rebuilding.	Long-term depressed abundance. Present in ocean fisheries north of Cape Falcon to southeast Alaska.

Conservation objectives and management information for natural and hatchery salmon stocks and stock complexes of significance to ocean salmon fisheries. Abundance information is based on the previous five years.

Stock	Conservation Objective (to be met annually unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Management Information
--- CHINOOK ---			
COLUMBIA RIVER BASIN (Continued)			
Upper River Spring	None applicable to ocean fisheries. Ensure ocean fishery impacts remain rare and recognize Columbia River Management Plan objective - MSY proxy of 115,000 adults above Bonneville Dam, including upper and mid-Columbia and Snake River stocks (state and tribal management entities considering separate objectives for these stocks).	No. Base period Council management area ocean fishery impacts rare (not measurable), making Council management area and rebuilding ineffective. Dam passage mortalities must be reduced to allow rebuilding.	Long-term depressed abundance. Captive broodstock programs started in 1997. No significance to ocean fisheries. Rare occurrence in ocean fisheries north of Cape Falcon to Canada.

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Conservation objectives and management information for natural and hatchery salmon stocks and stock complexes of significance to ocean salmon fisheries. Abundance information is based on the previous five years.

Stock	Conservation Objective (to be met annually unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Management Information
--- CHINOOK ---			
<p>WASHINGTON COAST - All pertinent fall, summer and spring stocks from coastal streams north of the Columbia River through the western Strait of Juan de Fuca (west of the Elwha River). This stock complex consists of several natural stocks, generally of small to medium sized populations, and some hatchery production (Willapa Bay and the Quinault River). Stocks in this complex tend to range further north than most Columbia River stocks and, while present in fisheries from Cape Falcon to Southeast Alaska, are not significantly affected by Council management area ocean fisheries. Preseason abundance estimates are generally not available for Council management area. These stocks qualify as exceptions to the Council's overfishing criteria due to very low fishery impacts. Spawning escapement goals for stocks managed within this component, established in U.S. District Court by WDFW and the treaty Tribes, are recognized in the Council's conservation objectives below. Objectives for Grays Harbor and the north coast river systems have been established pursuant to the U.S. District Court order in <i>Hoh v. Baldrige</i>. However, annual natural spawning escapement targets may vary from the conservation objectives below if agreed to by WDFW and the treaty Tribes under the provisions of <i>Hoh v. Baldrige</i> and subsequent U.S. District Court orders, subject to the limitations under Options B and C of Section 3.2.2, Conservation Alert. After agreement is reached on the annual targets, ocean fishery escapement objectives are established for each river, or region of origin, which include provisions for treaty allocation requirements and inside, non-Indian fishery needs.</p>			
Willapa Bay Fall (natural)	Undetermined.	Limited (exploitation rate exception).	
Willapa Bay Fall (hatchery)	8,200 adult return to hatchery.	No (hatchery exception).	
Grays Harbor Fall	14,600 natural adult spawners (MSY)	Limited (exploitation rate exception).	
Grays Harbor Spring	1,400 natural adult spawners (MSY)	Limited (exploitation rate exception).	
Quinault Fall	Hatchery production.	No (hatchery exception).	
Queets Fall	Manage terminal fisheries for 40% harvest rate, but no less than 2,500 natural adult spawners.	Limited (exploitation rate exception).	
Queets Spring/Summer	Manage terminal fisheries for 30% harvest rate, but no less than 700 natural adult spawners.	Limited (exploitation rate exception).	
Hoh Fall	Manage terminal fisheries for 40% harvest rate, but no less than 1,200 natural adult spawners.	Limited (exploitation rate exception).	
Hoh Spring/Summer	Manage terminal fisheries for 31% harvest rate, but no less than 900 natural adult spawners.	Limited (exploitation rate exception).	
Quillayute Fall	Manage terminal fisheries for 40% harvest rate, but no less than 3,000 natural adult spawners.	Limited (exploitation rate exception).	
Quillayute Spring/Summer	1,200 natural adult spawners for summer component (MSY).	Limited (exploitation rate exception).	
Hoko Summer/Fall (Western Strait of Juan de Fuca)	850 natural adult spawners (MSY).	Limited (exploitation rate exception).	

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Stock	Conservation Objective (to be met annually unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Management Information
--- CHINOOK ---			
<p>PUGET SOUND - All fall, summer, and spring stocks originating from U.S. tributaries to Puget Sound and the eastern Strait of Juan de Fuca (east of Salt Creek). This stock complex consists of numerous natural chinook stocks of small to medium sized populations and significant hatchery production. Puget Sound stocks contribute to fisheries off British Columbia and are present into Southeast Alaska, but are affected to a minor degree by Council management area ocean fisheries. Base period, Council management area ocean fishery exploitation rates (adult equivalent) of 2% or less are below a management threshold which allows effective Council management area of these stocks and they qualify as exceptions to the Council's overfishing criteria. The stocks within this unit and their respective conservation objectives, established in U.S. District Court by WDFW and the Treaty Tribes, are recognized below. The conservation objectives are based on maximum sustainable yield spawning escapement goals for stocks managed primarily for natural production or upon hatchery escapement needs for stocks managed for artificial production. Annual management targets (expected hatchery plus natural escapement) for specific rivers or regions of origin may vary from the conservation objectives by following fixed procedures established in U.S. District Court as outlined in "Memorandum Adopting Salmon Management Plan" (<i>U.S. v. Washington</i>, 626 F. Supp. 1405 [1985]) (see limitations under Options B and C of the conservation alert (Section 3.2.2)).</p>			
Elwha Summer/Fall (Eastern Strait of Juan de Fuca)	2,900 natural and hatchery adult spawners (MSY).	Limited (exploitation rate exception).	
Skokomish Summer/Fall (Hood Canal)	1,650 natural adult spawners (MSY).	Limited (exploitation rate exception).	
Nooksack Spring (early)	2,000 natural adult spawners (MSY).	Limited (exploitation rate exception).	
Skagit Summer/Fall	14,900 natural adult spawners (MSY).	Limited (exploitation rate exception).	
Skagit Spring	3,000 natural adult spawners (MSY).	Limited (exploitation rate exception).	
Stillaguamish Summer/Fall	2,000 natural adult spawners (MSY).	Limited (exploitation rate exception).	
Snohomish Summer/Fall	5,300 natural adult spawners (MSY).	Limited (exploitation rate exception).	
Cedar River Summer/Fall (Lake Washington)	1,200 natural adult spawners (MSY).	Limited (exploitation rate exception).	
White River Spring	1,000 natural adult spawners (MSY).	Limited (exploitation rate exception).	
Green River Summer/Fall	5,800 natural adult spawners (MSY).	Limited (exploitation rate exception).	
Nisqually River Summer/Fall (South Puget Sound)	900 natural adult spawners (MSY).	Limited (exploitation rate exception).	

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Conservation objectives and management information for natural and hatchery salmon stocks and stock complexes of significance to ocean salmon fisheries. Abundance information is based on the previous five years.

Stock	Conservation Objective (to be met annually unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Management Information
--- CHINOOK ---			
SOUTHERN BRITISH COLUMBIA - Fall and spring stocks of British Columbia coastal streams and the Fraser River. Management based primarily on natural and hatchery fall chinook. Base period, Council management area ocean fishery exploitation rates (adult equivalent) on the coastal stocks of 1% or less are below a management threshold which allows effective Council management area of these stocks and they qualify as exceptions to the Council's overfishing criteria.			
Coastal Stocks	Undefined for Council fisheries. Manage consistent with the Pacific Salmon Treaty.	No. Under Canadian authority and would also be an exploitation rate exception.	Medium abundance. Major contributors to ocean fisheries off British Columbia; significant contributors north into Southeast Alaska and present off northern Washington.
Fraser River	Undefined for Council fisheries. Manage consistent with the Pacific Salmon Treaty.	No. Under Canadian authority.	Medium abundance. Major contributors to ocean fisheries off British Columbia; contributors off northern Washington; and present north into Southeast Alaska.

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Stock	Conservation Objective (to be met annually unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Management Information
--- COHO ---			
OREGON PRODUCTION INDEX AREA - All Washington, Oregon, and California natural and hatchery coho stocks from streams south of Leadbetter Pt. Significant production from Columbia River and Oregon coastal hatcheries provide harvest in ocean fisheries throughout the Council management area. Ocean fisheries are usually limited primarily to meet natural escapement objectives. Treaty Indian obligations, nontreaty harvest opportunity, and hatchery requirements must also be factored in for the Columbia River stocks. Both natural and hatchery components have been severely depressed for several years due to a combination of previously high fishery impacts, major losses or degradation of freshwater habitat, and long-term marine conditions unfavorable to coho survival.			
Central California Coast (Threatened)	NMFS jeopardy standard. Since 1998, no retention of coho in commercial and recreational fisheries off California in conjunction with total fishery impacts of no more than 13% on Rogue/Klamath hatchery coho (surrogate stock).	MSY criteria undefined. ESA jeopardy standard provides interim protection of productive capacity. Recovery limited by deterioration of significant portions of freshwater habitat, distribution at southern edge of coho range, and ongoing unfavorable marine conditions.	Very minor component of OPI area fisheries, limited potential for significant contribution to ocean and inland fisheries. Current impacts incidental in ocean fisheries off California. Development of monitoring and assessment program considered for Ten Mile River, Noyo River, Gualala River, Lagunitas Creek, and Scott Creek. Rogue/Klamath coho are believed to have a similar, but more northerly distribution.
Northern California (Threatened)	NMFS jeopardy or recovery standard. Since 1998, total fishery impacts limited to no more than 13% on Rogue/Klamath hatchery coho (surrogate stock) and no retention of coho in California ocean fisheries.	MSY criteria undefined. ESA jeopardy standard provides interim protection of productive capacity. Recovery may last more than 10 years even with no fishery impacts due to loss or deterioration of significant portions of freshwater habitat and ongoing unfavorable marine conditions.	Depressed and listed. Very minor natural component of OPI area fisheries, potential for minor contribution to ocean fisheries off California and southern Oregon, and inland California fisheries. Current impacts incidental in ocean and inland fisheries (total non-retention south of Cape Falcon since 1994). CDFG considering monitoring to provide data for the Smith, Trinity, Eel, Mattole, and Klamath Rivers.
Oregon Coastal Natural Comprised of Southern, South-Central, North-Central, and Northern Oregon stocks (Threatened)	Current NMFS jeopardy or recovery standard (for 1998, total marine fishery impacts limited to no more than 13% on OCN and Rogue/Klamath hatchery coho, or (2) the Council's objective under Amendment 13 (consistent with the Oregon Plan): For each of the 4 component stocks, a rebuilding and data collection program with an allowable marine and freshwater exploitation rate of no more than 13% to 35%, depending on parent escapement and ocean survival trends (adopted 1997). For a detailed description of the objective, see Section 3.3.	Currently in a rebuilding program initiated in 1998. The annual conservation objective should allow these stocks to rebuild when environmental conditions are favorable. Recovery for some components may last more than 10 years even with no fishery impacts due to loss or deterioration of significant portions of freshwater habitat and ongoing unfavorable marine conditions.	Depressed and listed. Major natural component of OPI area which, when abundant, contributes to ocean fisheries off California, Oregon, and Washington south of Leadbetter Pt., and freshwater fisheries in Oregon coastal streams. Current impacts primarily incidental in ocean fisheries under a total nonretention regulation south of Cape Falcon since 1994.

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Conservation objectives and management information for natural and hatchery salmon stocks and stock complexes of significance to ocean salmon fisheries. Abundance information is based on the previous five years.

Stock	Conservation Objective (to be met annually unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Management Information
--- COHO ---			
OREGON PRODUCTION INDEX (Continued)			
Columbia River Late (Hatchery)	Hatchery rack return goal of 17,200 adults.	No (hatchery exception).	Major component of ocean fisheries north of Cape Falcon. When abundant, significant contributors to ocean fisheries off Oregon north into Canada and Columbia River fisheries.
Columbia River Early (Hatchery)	Hatchery rack return goal of 18,800 adults.	No (hatchery exception).	Major component of OPI area fisheries. When abundant, significant contributors to ocean fisheries off California and north to Leadbetter Pt., WA and to Columbia River fisheries. Current ocean fishery impacts from very limited retention fisheries north of Cape Falcon and incidental hook-and-release mortality in fisheries south of Cape Falcon.
Columbia River (Natural)	Undefined. Management is in a transitional phase pending completion of a critical review that may establish an explicit objective.	Not presently. See management information.	Extinct above The Dalles Dam, very rare below. Lower river coho are a candidate species under the ESA with an ongoing effort to determine if a reproducing population can be found and rebuilt.

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Stock	Conservation Objective (to be met annually unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Management Information
--- COHO ---			
WASHINGTON COASTAL - All pertinent natural and hatchery stocks originating in Washington coastal streams north of the Columbia River through the western Strait of Juan de Fuca (West of the Elwha River). Management goals for Grays Harbor and Olympic Peninsula coho stocks include achieving natural spawning escapement objectives and treaty allocation requirements, although Grays Harbor also contains a significant amount of hatchery production. The conservation objectives for these stocks are based on MSY spawner escapements established pursuant to the U.S. District Court order in <i>Hoh v. Baldrige</i> . Annual natural spawning escapement targets and total escapement objectives are established by the Washington Department of Fish and Wildlife and treaty Tribes under the provisions of <i>U.S. v. Washington</i> and subsequent U.S. District Court orders. After agreement to annual targets is reached by the parties in this litigation (subject to limitations under Options B and C of Section 3.2.2, Conservation Alert) ocean fishery escapement objectives are established for each river, or region of origin, which include provisions for providing treaty allocation requirements and inside, non-Indian fishery needs.			
Willapa Bay (Hatchery)	Meet WDFW program objectives.	No (hatchery exception).	Minor component of ocean fisheries off northern Oregon north into Canada. Significant contributor to inside commercial net and recreational fisheries. WDFW critically reviewing current management to determine if objectives for natural stocks are warranted.
Grays Harbor	35,400 natural adult spawners (MSY) or annual target agreed to by WDFW and the Quinault Indian Nation (subject to limitations in Options B and C of Sec. 3.2.2, Conservation Alert).	Yes. Conservation alert or overfishing concern based on fewer than 35,400 natural spawners.	Medium to high abundance. Minor contributor to ocean fisheries off Oregon and north into Canada. Significant contributor to Washington inside tribal fishery, minor contributor to inside recreational fishery.
Quinault (Hatchery)	Meet hatchery program objectives and provide escapement to utilize production potential for naturally spawning fish.	No (hatchery exception).	Contributor to ocean fisheries off Washington and north into British Columbia; present south to central Oregon; significance to Puget Sound and tribal fisheries.
Queets	MSY range of 5,800 to 14,500 natural adult spawners or annual target agreed to by WDFW and the Quinault Indian Nation (subject to limitations in Options B and C of Sec. 3.2.2, Conservation Alert).	Yes. Conservation alert or overfishing concern based on fewer than 5,800 natural spawners.	Small population. Low to depressed abundance. Contributor to ocean fisheries off Washington north into British Columbia; present south to central Oregon; significance to Puget Sound and tribal fisheries.

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Conservation objectives and management information for natural and hatchery salmon stocks and stock complexes of significance to ocean salmon fisheries. Abundance information is based on the previous five years.

Stock	Conservation Objective (to be met annually unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Management Information
--- COHO ---			
WASHINGTON COASTAL (Continued)			
Hoh	MSY range of 2,000 to 5,000 natural adult spawners or annual target agreed to by WDFW and Hoh Tribe (subject to limit in Options B and C of Sec. 3.2.2, Conservation Alert).	Yes. Conservation alert or overfishing concern based on fewer than 2,000 natural spawners.	Small population. Medium to low abundance. Contributor to ocean fisheries off Washington north into British Columbia; present south to central Oregon.
Quillayute Fall	MSY range of 6,300 to 15,800 natural adult spawners or annual target agreed to by WDFW and the Quillayute Tribe (subject to limit in Options B and C of Sec. 3.2.2, Conservation Alert).	Yes. Conservation alert or overfishing concern based on fewer than 6,300 natural spawners.	Small population. Depressed abundance. Contributor to ocean fisheries off Washington north into British Columbia; present south to central Oregon.
Quillayute Summer (Hatchery)	Meet hatchery program objectives.	No (hatchery exception).	Low to depressed abundance. Early river entry timing. Contributor to ocean fisheries off Washington north into British Columbia; present south to central Oregon.
Western Strait of Juan de Fuca	11,900 natural adult spawners (MSY) or annual target agreed to through fixed procedures established in U.S. District Court (subject to limit in Options B and C of Sec. 3.2.2, Conservation Alert).	Yes. Conservation alert or overfishing concern based on fewer than 11,900 natural spawners.	Small population. Low to depressed abundance. Little information on ocean distribution. A new annual objective of stepped exploitation rates is under consideration by WDFW and the Tribes.
--- COHO ---			
PUGET SOUND - All pertinent natural and hatchery stocks originating from U.S. tributaries to Puget Sound and the eastern Strait of Juan de Fuca (east of Salt Creek). The Puget Sound Salmon Management Plan defines management objectives and long term goals for these stocks as developed by representatives from federal, state and tribal agencies. Conservation objectives for specific stocks are currently based on either MSY principles for stocks managed primarily for natural production or upon hatchery escapement needs for stocks managed for artificial production. However, a transition to exploitation rate management is currently under consideration by the involved managers. Annual escapement targets for these coho stocks are developed through procedures established in U.S. District Court (subject to limitations in Options B and C of Section 3.2.2, Conservation Alert). Puget Sound management procedures are outlined in a "Memorandum Adopting Salmon Management Plan" (<i>U.S. v. Washington</i> , 626 F. Supp. 1405 [1985]).			
Eastern Strait of Juan de Fuca	950 natural adult spawners (MSY) or annual target agreed to in fixed procedures set by U.S. District Court (subject to limit in Options B and C of Sec. 3.2.2, Conservation Alert).	Yes. Conservation alert or overfishing concern based on fewer than 950 natural spawners.	Small population. Low to depressed abundance. Little information on ocean distribution. A new annual objective of stepped exploitation rates is under consideration by WDFW and the Tribes.

Conservation objectives and management information for natural and hatchery salmon stocks and stock complexes of significance to ocean salmon fisheries. Abundance information is based on the previous five years.

Stock	Conservation Objective (to be met annually unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Management Information
--- COHO ---			
PUGET SOUND (Continued)			
Hood Canal	21,500 natural adult spawners (MSY) or annual target agreed to in fixed procedures set by U.S. District Court (subject to limit in Options B and C of Sec. 3.2.2, Conservation Alert).	Yes. Conservation alert or overfishing concern based on fewer than 21,500 natural spawners.	Low to medium abundance. Contributor to U.S. ocean fisheries north of Cape Falcon; significant contributor to ocean fisheries off British Columbia, in Puget Sound, and inside tribal fisheries. A new objective utilizing stepped exploitation rates is under consideration by WDFW and the Tribes.
Skagit	30,000 natural adult spawners (MSY) or annual target agreed to in fixed procedures set by U.S. District Court (subject to limit in Options B and C of Sec. 3.2.2, Conservation Alert).	Yes. Conservation alert or overfishing concern based on fewer than 30,000 natural spawners.	Low to depressed abundance. Contributor to U.S. ocean fisheries north of Cape Falcon; significant contributor to ocean fisheries off British Columbia, in Puget Sound, and inside tribal fisheries. A new objective is under consideration by WDFW and the Tribes.
Stillaguamish	17,000 natural adult spawners (MSY) or annual target agreed to in fixed procedures set by U.S. District Court (subject to limit in Options B and C of Sec. 3.2.2, Conservation Alert).	Yes. Conservation alert or overfishing concern based on fewer than 17,000 natural spawners.	Medium to low abundance. Contributor to U.S. ocean fisheries north of Cape Falcon; significant contributor to ocean fisheries off British Columbia, in Puget Sound, and inside tribal fisheries. A new objective is under consideration by WDFW and the Tribes.
Snohomish	70,000 natural adult spawners (MSY) or annual target agreed to in fixed procedures set by U.S. District Court (subject to limit in Options B and C of Sec. 3.2.2, Conservation Alert).	Yes. Conservation alert or overfishing concern based on fewer than 70,000 natural spawners.	High to medium abundance. Contributor to U.S. ocean fisheries north of Cape Falcon; significant contributor to ocean fisheries off British Columbia, in Puget Sound, and inside tribal fisheries. A new annual objective is under consideration by WDFW and the Tribes.
South Puget Sound (Hatchery)	Hatchery rack return goal of 52,000 adults. Natural production goals under development.	No (hatchery exception).	High abundance. Contributor to U.S. ocean fisheries north of Cape Falcon; significant contributor off British Columbia, in Puget Sound, and inside tribal fisheries.

Appendix A

A-16

Pacific Salmon Fisheries Management PEIS

Conservation objectives and management information for natural and hatchery salmon stocks and stock complexes of significance to ocean salmon fisheries. Abundance information is based on the previous five years.

Stock	Conservation Objective (to be met annually unless noted otherwise)	Subject to Council Actions to Prevent Overfishing	Management Information
--- COHO ---			
SOUTHERN BRITISH COLUMBIA COAST - Stocks of southern British Columbia coastal streams (including Vancouver Island) and the Fraser River.			
Coastal Stocks	Manage Council fisheries that impact Canadian stocks consistent with provisions of the Pacific Salmon Treaty.	No. Not under Council management area authority.	Medium to low abundance. Major contributors to ocean fisheries off British Columbia; significant contributors north into Southeast Alaska and present off northern Washington.
Fraser River	Manage Council fisheries that impact Canadian stocks consistent with provisions of the Pacific Salmon Treaty.	No. Not under Council management area authority.	Medium to low abundance. Major contributors to ocean fisheries off British Columbia.
--- PINK (odd-numbered years) ---			
The Fraser River Panel of the Pacific Salmon Commission (PSC) manages fisheries for pink salmon in the Fraser River Panel Area (U.S.) north of 48° N latitude to meet Fraser River natural spawning escapement and U.S./Canada allocation requirements. The Council manages pink salmon harvests in that portion of the EEZ which is not in the Fraser River Panel Area (U.S.) waters consistent with Fraser River Panel management intent. Pink salmon management objectives must address meeting natural spawning escapement objectives, allowing ocean pink harvest within fixed constraints of coho and chinook harvest ceilings and providing for treaty allocation requirements.			
Puget Sound	900,000 natural spawners or consistent with provisions of the Pacific Salmon Treaty (Fraser River Panel)	No. Minor impacts in Council fisheries and not under Council management area authority.	High abundance. Contributors to ocean fisheries off British Columbia and in Puget Sound. Present south into Oregon. Rare off California.
Fraser River	Manage Council fisheries that impact Canadian stocks consistent with provisions of the Pacific Salmon Treaty (Fraser River Panel)	No. Minor impacts in Council fisheries and not under Council management area authority.	High to medium abundance. Major contributors to ocean fisheries off British Columbia; present into Southeast Alaska and off Washington and northern Oregon. Rare off California.